T0/588273

IAP11 Rec'd PCT/PTO 04 AUG 2006 PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Yasuyuki IRISAWA

Application No.: New U.S. National Phase of

PCT/IB2005/000599

Filed: August 4, 2006 Docket No.: 128568

For: FUEL INJECTION APPARATUS AND FUEL INJECTION CONTROL METHOD FOR INTERNAL COMBUSTION ENGINE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- 2. Relevance of one or more non-English language reference is discussed in the present specification. See Reference 7.
- One or more reference cited herein was cited in the International Search Report. An English language version of the International Search Report is attached for the Examiner's information. See References 1-4.
- 4. In accordance with 37 CFR §1.98(a)(2)(ii), copies of any U.S. patents and patent application publications are not attached.
- 5. A concise explanation of the relevance of one or more non-English language reference cited herein appears in the Appendix attached hereto. See References 7-12.
- 6. An English language Abstract of one or more non-English language reference is attached hereto. See References <u>7-12</u>.

40/588273New U.S. National Phase of PCT/IB2005/000599

IAP11 Rec'd PCT/PTO 04 AUG 2006

- 7. A computer-generated English language translation of one or more Japanese Patent Publication cited herein has been obtained from the website of the Japanese Patent Office ([http://www.jpo.go.jp]), and is attached, but has not been reviewed for accuracy. See References 7-11.
- \boxtimes 8. References <u>2-6</u> correspond to reference <u>1</u>.

Respectfulty submitted,

James A. Oliff

Registration No. 27,075

William P. Berridge Registration No. 30,024

JAO:WPB/kam

Date: August 4, 2006

OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
necessary for entry;
Charge any fee due to our
Deposit Account No. 15-0461

10/588273 IAP11 Rec'd PCT/PTO 04 AUG 2006 of 1

Form PTO-1449 (REV. 1/06)		US Dept. of Commerce PATENT & TRADEMARK OFFICE		ATTY DOCKET NO. 128568			APPLICATION NO. New U.S. National Phase of		
INFORMATION DISCLOSURE STATEMENT							PCT/IB200	5/000599	
(Use several sheets if necessary)				APPLICANT Yasuyuki IRISAWA					
·				FILING DATE August 4, 2006					
		U.	S. PATEN	T DOCUM	1ENTS				
Examiner Initials	Cite No.	Document Number	Da	ite	1	Name			
	1	2002/0007816 A1	01/24/20	002	LOYE et al.				
	2	2002/0020388 A1	02/21/20	002	WRIGHT et al				
**	3	2002/0017269 A1	02/14/20	002	LOYE et al.	-			
	4	2003/0168037 A1	09/11/20	003	LOYE et al.		···		
	5	2004/0149255 A1	08/05/2004		LOYE et al.	·····			
	6	2004/0040692 A1	03/04/2004		PIN-HUNG	···			
		FORI	EIGN PAT	ENT DOC	CUMENTS			,	
Examiner Initials	Cite No.	Document Number	Da	ate	Country		With English Abstract	With English Translation	
	7	JP A 10-103118	04/21/19	998	JAPAN		Х	х	
	8	JP A 11-303669	11/02/19	999	JAPAN		X	х	
	9	JP A 07-103049	04/18/19	995	JAPAN		х	х	
	10	JP A 07-103019	04/18/19	995	JAPAN		X	х	
	11	JP A 05-231221	09/07/19	993	JAPAN		X	х	
	12	JP A 63-154816	06/28/19	988	JAPAN		X		
	•		OTHER I	OCUME	NTS				
Examiner Initials									
								····	
			10-016-0170-170-170-170-170-170-170-170-170-17						
						-			
					·			<u> </u>	
				<u> </u>				·-	
			<u>.</u>		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	
								the state of the s	
EXAMINER					DATE C	ONSIDERED			
Examiner:		citation considered, whether or not citat				rough cita	ation if not in	conformance	

Date: <u>August 4, 2006</u>

10/588273

IAP11 Rec'd PCT/PTO 04 AUG 2006

APPENDIX

List of Documents for IDS

Publication No.	File Date	Publication Date	Comments
		Or	
		Issue Date	
JP (A) 10-103118	Co 05		Explained in the specification.
91 (A) 10 103118	Sep. 25,	Apr. 21,	Emplamed in the specification.
ID (A) 11 000000	1996	1998	
JP (A) 11-303669	Apr. 24, 1998	Nov. 2, 1999	An engine is provided with a main direct fuel injection valve and an auxiliary fuel injection valve (i.e. port injection valve). A means for temporarily correcting a fuel injection amount of the main fuel injection valve to be increased at the time of switching the auxiliary fuel injection valve to the operating condition is provided.
JP (A) 5-231221	Feb. 18, 1992	Sep. 7, 1993	An engine is provided with a first fuel injection valve for port injection and a second fuel injection valve for in-cylinder injection. A flow amount of attached fuel flowing into a combustion chamber of the engine is estimated. While the in-cylinder injection amount in the start of port injection is correctively increased by the attached fuel amount, the in-cylinder injection amount in the stoppage of port injection is correctively reduced by the inflow amount.
JP (A) 63-154816	Dec. 18, 1986	Jun. 28, 1988	Fuel is sprayed from both sides of direct injection and manifold injection (i.e. port injection) for a predetermined period at the time of the changeover from a low load side control to a high load side control and vice versa.
JP (A) 7-103049	Oct. 12, 1993		An engine is provided with a first fuel injection valve for attaining stratified combustion by directly injecting fuel into a combustion chamber and a second fuel injection valve for attaining uniform combustion by injecting fuel to an intake passage. Both of the first fuel injection valve and the second fuel injection valve inject fuel at the time of the changeover (when an adjusting delay of re-circulated

	·		exhaust gas amount).
JP (A) 7-103019	Oct. 7, 1993	Apr. 18, 1995	An engine is provided with a port injection valve and an in cylinder injection valve for directly inject fuel into a combustion chamber. When the engine is in the condition of fuel cut, the fuel injection is changed from the port injection to the in cylinder injection.

•

.

.

.

.